

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,651	03/30/2001	Scott J. Tuman	54407USA6B.006	9447
75	90 10/16/2002			
Office of Intellectual Property Counsel 3M Innovative Properties Company PO Box 33427 St. Paul, MN 55133-3427			EXAMINER	
			· TSOY, ELENA	
			ART UNIT	PAPER NUMBER
			1762	
		DATE MAILED: 10/16/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

Art Unit: 1762

Response to Amendment

1. Amendment filed on August 20, 2002 has been entered.

Claim Objections

2. Claims 40-42, 48 are objected to because of the following informalities:

Claim 40, line 6, claim 41, line 2, claim 42, line 2, "the plurality of stems are oriented" should be changed to -- the plurality of stems is oriented --.

Claims 41, line 3, claim 42, line 3, "the plurality of stems are angled" should be changed to -- the plurality of stems is angled --.

Claim 48, line 6, "the plurality of stems are adapted" should be changed to -- the plurality of stems is adapted --.

Double Patenting

3. Claim 49 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 48. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Application/Control Number: 09/822,651

Art Unit: 1762

. . . .

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 5. Claims 21-31, 33-35, 37, 39, 40, 42-53, 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Thomas (US 5,586,371).

As to claims 21, Thomas discloses a web construction comprising a substrate (web) 24 coextensive with the web construction; a plurality of discrete polymeric regions fused to a first major side of the web 24 and a plurality of stems extending from each of said discrete polymeric regions (See Figs. 2, 3; column 6, lines 14-40; column 15, lines 26-46).

As to claims 22, 45, 48, 49, the web 24 comprises <u>loop structures</u> adapted to lock with the plurality of stems (See Figs. 2, 3; column 6, lines 14-40; column 15, lines 26-46).

As to claim 23-26, 28, 46, 47, 50, the web 24 comprises knitted (elastic, porous) fabric, woven (elastic, porous) materials (See column 6, lines 44-45).

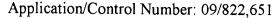
As to claim 27, the web comprises nonwoven web material (See column 6, line 45).

As to claims 29, 43, 51, the plurality of discrete regions comprises a plurality of stripes (See Fig. 2).

As to claims 30, 44, 52, the plurality of discrete regions comprises a plurality of patches (See Fig. 2).

As to claims 31, 40, 53, the plurality of stems is oriented at an angle that is <u>not normal</u> to the web plane (See Fig. 2).

As to claims 33, 42, 55, the plurality of stems is oriented in the <u>same direction</u> at an angle that is not normal to the web plane (See Fig. 2).



Art Unit: 1762

As to claims 34, 35, the plurality of discrete regions covers between 1 and 99 % of the first side of the web (See Fig. 2).

As to claim 37, the plurality of discrete regions is separated from one another by an average of approximately 1.0-20 mm (See Fig. 2; column 7, lines 47-58).

As to claim 39, the plurality of stems comprises hook (See Fig. 2).

6. Claims 21, 22, 24, 25, 29, 30, 34, 36, 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Lina (US 5,989,204).

As to claims 21, 30, 39, Lina discloses a web construction of fused (by heat-welding) together sheets 2 and 3 (See column 3, lines 8-10; column 4, lines 29-40) comprising a web 3 coextensive with the web construction; a plurality of discrete Velcro hook patches 6 and 8 welded (fused) to a first major side of the web 3 and a plurality of hooks (stems) extending from each of said discrete Velcro hook patches 6 and 8 (See Fig. 2; column 3, lines 3-6; column 5, lines 42-46).

It is the Examiner's position that the Velcro hook patches 6 and 8 are polymeric regions since it is well known in the art that Velcro hook fasteners are made from polymeric materials.

Therefore, hook fasteners 6 and 8 in Lina are polymeric *inherently*.

As to claim 22, the web 3 comprises <u>loop structures</u> adapted to lock with the plurality of stems (See column 3, lines 3-6; column 4, lines 8-13).

As to claims 24, 25, the web 3 comprises fibrous material (See column 4, lines 9-10, 36).

As to claim 29, the discrete Velcro hook patches 6 and 8 comprise a plurality of stripes (See Fig. 2).

Application/Control Number: 09/822,651

Art Unit: 1762

As to claims 34, 36, the discrete Velcro hook patches 6 and 8 cover 1-99 % of the first major side of the web 2, 3 (See Fig. 2).

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 32, 41, 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5,586,371), as applied above, further in view of Murasaki (US 5,643,651).

Thomas fails to teach that the plurality of stems is oriented in multiple directions.

Murasaki teaches that a plurality of stems oriented at an angle that is not normal to the plane of the web in multiple directions provides a fastener with no directivity in engaging strength (See column 7, lines 53-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted a hook material in Thomas with a hook material having stems that are angled in multiple directions with the expectation of providing the fastener with no directivity in engaging strength depending on particular use of a final product, as taught by Murasaki.

9. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5,586,371).

Application/Control Number: 09/822,651

Art Unit: 1762

Thomas, as applied above, fails to teach that the plurality of discrete regions covers between 5 and 25 % of the first side of the web.

It would have been an obvious matter of design choice to make discrete regions of any desirable size and pattern including claimed patch pattern or claimed coverage of the web of 5-25% depending on the particular application of end product, since such a modification would have involved a mere change in the size. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

10. Claims 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lina (US 5,989,204), as applied above, and further in view of Shepard et al (US 6,205,623).

Lina fails to teach that each stem of the plurality of stems comprises a mushroom head.

Shepard et al teach that hook-shaped fastener elements are functionally equivalent to mushroom head-shaped fastener elements for releasably engaging a loop material (See column 2, lines 22-24; column 6, lines 46-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used mushroom head-shaped fastener elements in Lina instead of hook-shaped fastener elements since Shepard et al teach that hook-shaped fastener elements are functionally equivalent to mushroom head-shaped fastener elements for releasably engaging a loop material.

Response to Arguments

11. Applicant's arguments with respect to claims 21-55 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is (703) 605-1171. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

27

MICHAEL BARR PRIMARY EXAMINER

Elena Tsoy Examiner Art Unit 1762

September 16, 2002